



Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules
Product code : 538831944

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Insecticide

1.3. Details of the supplier of the safety data sheet

Bonide Products, LLC
6301 Sutliff Road
Oriskany, NY 13424
Telephone Number: (315) 736-8231
Comment: Bonide hours of operation are 8:00 a.m. to 4:30 p.m EST.
Website: www.bonide.com
Email address: sales@bonide.com

1.4. Emergency telephone numbers (24 hour)

Medical : SafetyCall - (833) 972-1101
Spills : CHEMTREC - 1 (800) 424-9300 and/or 1 (703) 527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute toxicity - Inhalation 4 H332
Eye damage/irritation 2B H320
Specific Target Organ Toxicity (STOT) single exposure, Respiratory tract irritation 3 H335
Carcinogenicity 2 H351
Specific Target Organ Toxicity (STOT) repeat exposure 2 H373

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H332 - Harmful if Inhaled
H320 - Causes eye irritation
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer (inhalation)
H373 - May cause damage to lungs through prolonged or repeated exposure

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 - Use only outdoors or in a well-ventilated area.
P264 - Wash hands thoroughly after handling.
P305 + P351 + P338 - IF IN EYES - Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P337 + P317 - If eye irritation persists: Get medical help.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P317 - Get medical help.

2.3. Other hazards

Avoid creating dust when handling, using or storing. Exposure may aggravate pre-existing eye, skin, or respiratory conditions. May cause skin irritation.

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%
Bifenthrin	(CAS No) 82657-04-3	0.115

Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%
Calcium Carbonate	471-34-1	< 96*
Silica	14808-60-7	< 1*

*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the person to rest. Obtain emergency medical attention.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

May release irritating and toxic gases due to thermal decomposition. Products of decomposition may include CO, CO₂, hydrogen chloride, and hydrogen fluoride.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Isolate fire area and evacuate downwind. DO NOT breathe gases, smoke or vapors generated. Wear self-contained breathing apparatus and full-protective clothing.
- Hazardous Combustion Products : Crystalline silica exists in several forms, the most common of which is quartz. If crystalline silica (quartz) is heated to more than 870°C, it can change to a form of crystalline silica known as trydimite, and if crystalline silica (quartz) is heated to more than 1470°C, it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as trydimite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Isolate and post spill area. Wear protective clothing and personal protective. Keep unprotected persons and animals out of the area. Keep material out of lakes, streams, ponds and sewer drains. Large spills should be covered to prevent dispersal. **For dry material, use a wet sweeping compound or water to prevent the formation of dust.** If water is used, prevent runoff or dispersion of excess liquid by diking and absorbing with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump all waste material, including absorbent, into a drum and label contents for disposal.

Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not contaminate water, food, or feed by storage or disposal. Do not use or store near heat, open flame or hot surfaces. Carefully open containers and after partial use close container tightly. Avoid contact with skin, eyes or clothing. Avoid breathing dust.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor/dust. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from moisture. Keep container closed when not in use. Keep out reach of children and domestic animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. For rigid containers after partial use replace lids and close tightly. For bags after partial use, reseal opened bag by folding top down and securing.

Storage Temperature : Normal ambient temperatures. Avoid exposure to extreme temperatures.

Incompatible materials : Strong bases. Oxidizers. Acids. Dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

For substances listed in Section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Silica (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m ³)	50 µg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.05 mg/m ³ (respirable dust)
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)

Calcium Carbonate (471-34-1)		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)

* Limestone is not a carcinogen listed by ACGIH, MSHA, OSHA, NTP, DFG, RSST, or IARC. However, crystalline silica may be at or above detection levels (0.1%). Occurrence is dependent upon the stone source, process and specific application.

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Respiratory protection : Wear approved mask.
Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Greyish - tan solid granule.
Color : Greyish - tan.
Odor : Slightly musty.
Odor threshold : No data available
pH : No data available
Flash point : Not applicable
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable
Relative density : No data available
Bulk Density : 45-80 lb/cu ft

Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility : Insoluble in water.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Moisture. Extremely high temperatures.

10.5. Incompatible materials

Strong bases. Oxidizers. Acids. Dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas.

10.6. Hazardous decomposition products

May release irritating and toxic gases due to thermal decomposition. Products of decomposition may include CO, CO₂, hydrogen chloride, and hydrogen fluoride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects (Bifenthrin)

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD₅₀ (Rat): > 5,000 mg/kg

Acute Dermal LD₅₀(Rat): > 2,000 mg/kg

Acute Inhalation LC₅₀(Rat): > 2 mg/L (4-hr)

Eye Irritation (Rabbit): Moderately irritating

Skin Irritation (Rabbit) : Slightly irritating

Dermal Sensitization: Not a skin sensitizer in guinea pigs following repeated skin exposure.

PRIMARY ROUTES OF EXPOSURE: Skin and eye contact, and inhalation.

POTENTIAL HEALTH EFFECTS: Effects from overexposure may result from either swallowing, inhaling or coming into contact with the skin or eyes. Symptoms of overexposure include bleeding from the nose, tremors and convulsions. Contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These skin sensations are reversible and usually subside within 12 hours.

MUTAGENIC POTENTIAL:

Bifenthrin: None observed.

TERATOGENIC EFFECTS:

Bifenthrin: None observed.

11.1 Information on toxicological effects (Limestone)

Skin corrosion/irritation	: Direct contact may cause irritation by mechanical abrasion.
Serious eye damage/irritation	: Direct contact with dust may cause irritation by mechanical abrasion or corrosive action. Conjunctivitis may occur.
Respiratory or skin sensitization	: Dust may irritate nose, throat, mucous membranes and respiratory tract by mechanical abrasion. Coughing, sneezing, chest pain, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures in excess of appropriate exposure limits. Inhalation of excessive concentrations of dust, including this material, may lead to lung injury.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Limestone (calcium carbonate) is not a carcinogen. May cause cancer (Inhalation).
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Causes damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).
Aspiration hazard	: Not classified
Symptoms/Injuries After Inhalation	: Respiratory irritation. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.
Symptoms/Injuries After Skin Contact	: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	: Ingestion may cause adverse effects

Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Chronic Symptoms : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

LD50 and LC50 Data:

Silica (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
Calcium Carbonate (471-34-1)	
LD50 Oral Rat	6450 mg/kg

Silica (14808-60-7), IARC Group 1, National Toxicology Program (NTP) Status Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List - In OSHA Hazard Communication Carcinogen list

SECTION 12: Ecological information

12.1. Toxicity

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to fish and aquatic invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street, back onto the treated area of the lawn or garden will help to prevent run off to water bodies or drainage systems.

ECOTOXICOLOGICAL INFORMATION:

Aquatic Organisms Effects:

Rain trout LC50: 0.00015 mg/L

Bluegill LC50: 0.00035 mg/L

Daphnia magna EC50: 0.0016 µg/L

Effects on Birds:

Mallard Duck LD50 (21-day): 2150 mg/kg

Bobwhite quail LD50 (21-day): 1,800 mg/kg

Bifenthrin (82657-04-3)	
LC50 fish 1	0.1 µg/l (96 h; Oncorhynchus mykiss; Lethal)
EC50 Daphnia 1	0.11 µg/l (48 h; Daphnia magna; Lethal)

12.2. Persistence and degradability

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Persistence and degradability	Not established.

Bifenthrin (82657-04-3)	
Persistence and degradability	Not readily biodegradable in water. Low potential for mobility in soil.

12.3. Bioaccumulative potential

Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules	
Bioaccumulative potential	Not established.

Bifenthrin (82657-04-3)	
Log Pow	> 6
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Pesticide wastes are toxic. Do not contaminate water, food, or feed by storage or disposal.

Ecology - waste materials : Avoid release to the environment.

Bonide Eight Insect Control Flower & Vegetable Above & Below Soil Insect Granules

Safety Data Sheet

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SECTION 14: Transport information

Not regulated for transport by DOT

SECTION 15: Regulatory information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

15.1. US Federal regulations

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Chronic health hazard (delayed)

Section 313: Bifenthrin (0.115%) CAS #:82657-04-3

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

15.2. US State regulations

Bifenthrin (82657-04-3)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information : None.

SDS US (GHS HazCom 2012) - Pesticides

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product